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Serial No. 10/670,594, filed 3/1/04

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A preload shock absorber assembly comprising:
a shock absorber having a hydraulic cylinder; and
first, second and third springs arranged outside of said hydraulic cylinder, said first spring providing a compressible fluid, said second spring spaced axially from said first spring, and said third spring arranged at least partially coaxially to said first spring, said second and third springs having an unequal spring rate relative to each other; and
wherein said shock absorber includes a cylinder head at one end of said hydraulic cylinder slideably supporting a rod with a seal between said rod and said cylinder head, and a cavity adjacent to said seal and radially inward of said first spring, said cavity being at approximately atmospheric pressure in a static condition.
2. (Cancelled)
3. (Previously Presented) The assembly according to claim 1, wherein said first spring is arranged radially outward of said hydraulic cylinder and is provided by pressurized air at a greater pressure than said atmospheric pressure.

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4. (Previously Presented) The assembly according to claim 1, wherein said first spring is provided by walls forming a pressurized sealed air chamber, and said third spring is arranged in said pressurized sealed air chamber.
5. (Previously Presented) The assembly according to claim 4, wherein an axially movable separator provides one of said walls, said axially movable separator arranged axially between said first and second springs.
6. (Previously Presented) The assembly according to claim 5, wherein said second spring is supported between said axially movable separator and a seat secured to said hydraulic cylinder.
7. (Currently Amended) The assembly according to claim 4, wherein said pressurized sealed air chamber is arranged radially outwardly from a rod seal slideably supporting ~~a said rod of said hydraulic cylinder.~~

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8. (Currently Amended) A preload shock absorber assembly comprising:

a shock absorber having a hydraulic cylinder with a seat secured to an outer wall of said hydraulic cylinder, and a rod partially arranged within said hydraulic cylinder, said rod movable relative to said seat;

a preload air chamber having a pressurized compressible fluid, said preload air chamber arranged radially outwardly of said outer wall of said hydraulic cylinder; and

a first spring arranged between said preload air chamber and said seat; and

wherein a second spring is arranged within said preload air chamber, and wherein said preload air chamber includes an axially movable separator, and said pressurized compressible fluid and said second spring exert a preload on said first spring.

9. (Cancelled)

10. (Cancelled)

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11. (Previously Presented) A preload shock absorber assembly comprising:

a shock absorber having a hydraulic cylinder with an outer wall, and a rod arranged interiorly of said outer wall and sealed relative to a cylinder head by a rod seal, said rod seal exposed to atmospheric pressure on a side;

an air chamber providing a first spring rate arranged radially outwardly from said outer wall, said air chamber pressurized above said atmospheric pressure on said side; and

a first mechanical spring arranged within said air chamber providing a second spring rate supplementing said first spring rate.

12. (Previously Presented) The assembly according to claim 11, wherein a seat is secured to said outer wall, and a second mechanical spring is arranged between said seat and said air chamber.

13. (Previously Presented) The assembly according to claim 12, wherein said air chamber includes an axially movable separator arranged between said first and second mechanical springs, with said first spring rate and said second spring rate exerting a force on said second mechanical spring.